



RE: VA WIP - Issue with Post Processed Reduction Estimates

Mark Dubin to: 'Keeling, William (DCR)', Russ Perkinson

11/04/2010 08:05 PM

"Pollock, Alan (DEQ)", Ann Carkhuff, Chris Brosch,
Cc: "fjcoale@umd.edu", "Frye, Jack (DCR)", Kelly Shenk, "Pattison,
Kenn", Lucinda Power, "Pat Buckley", Richard Batiuk, Robert

Good Evening Bill and Russ,

Thank you for sharing your thoughts on the current definition of the Continuous No-Till (CNT) BMP that is currently in place for Bay modeling. I appreciate the past efforts that Virginia has made towards obtaining the recognition of CNT by the Bay Program partnership. In my former position with Pennsylvania, you may recall that I too was involved with the development of CNT in partnership with Virginia, and can attest of the past shared efforts between both states.

Although neither Virginia nor Pennsylvania were totally pleased with the outcomes of one of the most rigorous BMP reviews up to that time, the final agreement was that the present definition would serve as a placeholder until such time as additional research data on the effects of CNT could be provided. During the intervening years, several CNT projects have been implemented and data collected between the academic institutions, USDA-NRCS and state partners towards addressing the need for additional data. It is the belief of Dr. Frank Coale, Chair of the Agriculture Workgroup (AgWG) and other partners that it is time to re-evaluate the current CNT placeholder definition.

There is little question that re-evaluating the CNT definition is needed in the short term, and that it should be considered a priority by the AgWG to do so. Similar to our previous efforts, there are other points of opinion on the effects of CNT, as well as other sources of research data. To maintain the integrity of the process and the partnership, we should not abandon the full protocol process at this juncture. The message from both Virginia and Pennsylvania has been heard loud and clear, but it is imperative that we allow for this evaluation discussion to take place within a science panel so that all opinions may be included in the final recommendations.

I fully understand and appreciate Virginia's interest to be able to utilize implementation data from existing conservation efforts for the TMDL Phase I WIP. Just as you have transferred CNT acres within Virginia's WIP input decks to Conservation Tillage acres, so to I have been advising other states to follow likewise in their WIPs. This action may provide a small net increase in the total potential nutrient reductions from the models due to the availability of additional reductions from nutrient management and cover crops. Although not a preferred method to account for CNT acres, it does provide the Bay jurisdictions with a temporary means to account for reductions. In addition, due to the 5-Year versus 1-Year implementation requirement, the level of reasonable assurance required from EPA to validate the implementation goals is reduced.

Both Dr. Coale and I wish to provide our commitment on behalf of the AgWG that a workgroup meeting will be convened within the next 30 days and the CNT issue will be given priority in that discussion. It is our opinion that the CNT re-evaluation should be conducted by a science panel representative of the six Bay jurisdictions to produce a science-based recommendation that addresses both positive and negative viewpoints in equality, supported by corresponding research data.

I wish to thank you again for bringing the matter of re-evaluating the CNT to the forefront of the partnership and EPA, not dissimilar to previous efforts by Virginia. Although there may be a similarity in Virginia's leadership in this matter, the process of the past has been replaced by a new protocol, a new workgroup and team structure, and a new leadership. Thus, the same outcome should not be expected nor implied.

Should you wish to contact me directly to discuss the next steps in moving forward with a re-evaluation of the CNT BMP with the AgWG, please do so at your earliest convenience. I look forward to working with Virginia and the other partners in resolving this matter. Thanks!

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-----Original Message-----

From: Keeling, William (DCR) [mailto:William.Keeling@dcr.virginia.gov]
Sent: Wednesday, November 03, 2010 8:00 AM
To: Antos.Katherine@epamail.epa.gov; Russ Perkinson
Cc: Pollock, Alan (DEQ); Carkhuff.Ann@epamail.epa.gov; Chris Brosch; fjcoale@umd.edu; Frye, Jack (DCR); Shenk.Kelly@epamail.epa.gov; Pattison, Kenn; Power.Lucinda@epamail.epa.gov; Mark Dubin; Pat Buckley; Batiuk.Richard@epamail.epa.gov; Koroncai, Bob
Subject: RE: VA WIP - Issue with Post Processed Reduction Estimates

To all,

As the one who did all the calculations to include over 1,100 P-index runs related to the CNT reduction efficiencies that are currently being used in phase 5.x modeling and what was used in the previous phase 4.3 model. That the efficiencies currently used for CNT were calculated strictly on the sediment benefit and attached nutrients to that sediment. It does not include nutrient management reduction estimates or any other estimated reductions from associated BMPs like cover crops. These efficiencies were developed for modeling in the phase 4.3 environment where nutrient management was hard wired into the model which justified the current definition of not allowing stacking with other BMPs. Phase 5.x treats NM completely differently and does not justify the definition of not allowing NM credit or stacking. Virginia is not asking for a change in the calculated efficiencies just a change in the definition that would allow BMPs to be stacked. Since NM was not part of the calculated reduction benefit nor were any other BMPs it seems to me that we are not going to double count anything and this is more a modification to Scenario Builder than the reduction efficiencies.

Remember also the Dr. Simpson did not include CNT for review in his multi-year BMP study because of the vigorous review CNT got over the 3 years it took to get it into the modeling. It has also been recognized that this definition issue was a problem since shortly after it got approved. The current definition results in a BMP system that uses no-till technologies on all crops in a rotation, and nutrient management, and cover crops, and is part of an overall conservation plan only being allowed to get credit for just the tillage aspects. And results in any cropland acreage being utilized in CNT being barred from having any other BMPs represented in a simulation. What other systems approach BMP does CBP simulate this way? It appears to me that part of the flexibility built into the phase 5.x modeling was the ability to stack BMPs in a system which appears to be allowed on all other non-land use change BMPs except this one. This is not logical and why we in Virginia did not include a single acre of CNT in our WIP input decks but will implement conservation tillage via CNT in our WIP plan and in reality. This is in effect playing modeling games.

I agree that the AgWG and WTWG should review this to determine if any panels are needed or if this is just a change in the definition to allow stacking with other BMPs at the current estimated efficiencies. To me this is simple. Scenario Builder is modified (something EPA has said can easily occur and happens regularly) to credit CNT on the nutrient management low till cropland (nlo) and allow stacking with other non-land use change BMPs such as cover crops and conservation plans. This would bring the simulation of this BMP system closer to reality. Based on the following quote from the approved BMP protocol it would seem that we do not need to convene a separate panel of experts as this is an existing BMP and the workgroups can modify this BMP via meetings/calls of those workgroups.

"IIB. Review Process for Existing Estimates or Treatment Processes
If approved by the WQGIT Chair, the review of existing estimates can be conducted within a source Workgroup in consultation with the WTWG. This approach should reduce the amount of time necessary to conduct the review because the definition(s) have already been developed, a background of available data already exists, and issues of how the practices or land use is incorporated into the CBWM have been addressed. Reviews of existing estimates should follow the guidelines listed in IIA above except that a separate review panel is not convened and the information generated is added to the existing support documentation for the estimate."

William Keeling
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"it shall be the Commonwealth's policy to protect its atmosphere, lands, and waters from pollution, impairment, or destruction, for the benefit, enjoyment and general welfare of the people of the Commonwealth"

Section 1 Article XI of the Virginia Constitution

-----Original Message-----

From: Antos.Katherine@epamail.epa.gov
[mailto:Antos.Katherine@epamail.epa.gov]
Sent: Tuesday, November 02, 2010 8:07 PM
To: Perkinson, H. (DCR)
Cc: Pollock, Alan (DEQ); Carkhuff.Ann@epamail.epa.gov;
cbrosch@chesapeakebay.net; fjcoale@umd.edu; Frye, Jack (DCR);
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Power.Lucinda@epamail.epa.gov; mdubin@chesapeakebay.net; Buckley,
Patricia; Batiuk.Richard@epamail.epa.gov; Keeling, William (DCR)
Subject: RE: VA WIP - Issue with Post Processed Reduction Estimates

Hi Russ -

Thank you for your email. We did see your request in August to review the continuous no-till efficiencies. As you and Kenn are aware, it takes time to assemble the expert panels and fully review these BMPs through the protocol. I have asked Mark Dubin and Frank Coale to put this on the agenda of the next Agriculture Workgroup meeting; they should be following up with you this week to confirm this request and briefly discuss some of the research on continuous no-till that will have to be reviewed as part of this panel. Many thanks to you, Bill and Kenn in advance for the review that I know you will provide when these panels are underway. I have also asked Chris Brosch, as the new Chair/Coordinator of the Watershed Technical Workgroup, to support this review.

Even if we had commenced the BMP review protocol in August (which we did not because our state partners were as busy as us on a few *other* items and did not have the time to invest in this review), the results would not have been available by November. Therefore, for the final Phase I WIP I suggest that you take Jeff's recommendation and Pennsylvania's approach to stack conservation tillage, NMPs, and cover crops in lieu of continuous no till in your WIP input deck. This approach will:

- Address your request to provide more reductions than continuous no-till alone
- Remain consistent with CBP-approved BMP definitions that are supported by documentation
- Avoid double-counting since NMP is already a part of the continuous no-till definition and efficiency
- Allow EPA to process your input deck as quickly as possible - I know time is of the essence for VA as we work together to strengthen VA's WIP, and I don't want time spent on redefining continuous no-till and rerunning input decks be the reason that we don't have time to support you on other WIP items over the next 2 weeks
- EPA is fine if the WIP document explains that VA has captured its continuous no-till commitments and strategies as a combination of cover crops, conservation tillage, and NMPs in order to keep the WIP and state strategies consistent with the WIP input deck.

I am on the road most of the day tomorrow, but I would be happy to follow up with you on Thursday.

Best,
Katherine

Katherine Wallace Antos

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| Batiuk/CBP/USEPA/US@EPA, Lucinda Power/DC/USEPA/US@EPA, "Buckley,
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| RE: VA WIP - Issue with Post Processed Reduction Estimates
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Kelly - I brought the issue up again concerning the present inability in the Model to use the (1) Continuous No-Till (CNT) practice with (2) cover crops or (3) nutrient management in our meeting with EPA last Friday. Jeff Sweeney told Bill and me yesterday that we need to take this request to the Ag Workgroup. I suppose Kenn Pattison's verbal request on the WQGIT call a few meetings ago and both his and my previous email requests have not been sufficient to get this on the agenda of a meeting. I believe Kenn was suggesting the WTWG deal with it.

I am copying Frank Coale to ask that this request be expedited and looked at immediately through a conference call or meeting since it concerns both PA's and VA's WIPs. Further, it is a joint request from both jurisdictions that initiated the CNT practice. I also ask that the WTWG hold a meeting or conference call immediately to discuss the issue.

It makes no sense to not allow the stacking of CNT, cover crops, and nutrient management plans on the same acres. The reduction efficiencies for cover crops allow a significant N reduction, but no P reduction in most cases. CNT impacts mostly P and sediment and little N effect. Having to decide between the two practices in the Model for fields where both practices are used is crazy.

Russ

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-----Original Message-----

From: Pattison, Kenn [mailto:kpattison@state.pa.us]
Sent: Friday, August 27, 2010 7:49 AM
To: shenk.kelly@epamail.epa.gov
Cc: Antos.Katherine@epamail.epa.gov; Carkhuff.Ann@epamail.epa.gov;
cbrosch@chesapeakebay.net; mdubin@chesapeakebay.net;
Batiuk.Richard@epamail.epa.gov; Power.Lucinda@epamail.epa.gov; Buckley,
Patricia; Pollock, Alan (DEQ); Keeling, William (DCR); Frye, Jack (DCR);

Perkinson, H. (DCR)
Subject: RE: VA WIP - Issue with Post Processed Reduction Estimates

Hi Kelly,

During a previous conference call, Pennsylvania made an official request to the Water Quality Implementation goal to have the definition of CNT change to allow additional BMPs. A follow-up request by e-mail was submitted to Rich Batik, Bob Koroncai, and Dave Hansen on August 12, 2010.

Kenn

-----Original Message-----

From: Perkinson, H. (DCR) [mailto:Russ.Perkinson@dcr.virginia.gov]
Sent: Friday, August 27, 2010 7:29 AM
To: shenk.kelly@epamail.epa.gov
Cc: Antos.Katherine@epamail.epa.gov; Carkhuff.Ann@epamail.epa.gov; cbrosch@chesapeakebay.net; mdubin@chesapeakebay.net; Batiuk.Richard@epamail.epa.gov; Power.Lucinda@epamail.epa.gov; Pattison, Kenn; Buckley, Patricia; Pollock, Alan (DEQ); Keeling, William (DCR); Frye, Jack (DCR)
Subject: RE: VA WIP - Issue with Post Processed Reduction Estimates

Kelly - Pertaining to your statement on the nursery BMP, we do have this defined in our draft WIP you will see soon. However, I'll send the definition/description up later today along with 2 onsite/septic BMPs we had previously made CBP aware of and had requested the Wastewater Workgroup to consider some time ago.

Concerning the CNT, consider this our formal request that the WQGIT amend the current procedure so that credit for CNT acres can also be eligible for the NMP BMP.

Regards,
Russ

-----Original Message-----

From: shenk.kelly@epamail.epa.gov [mailto:shenk.kelly@epamail.epa.gov]
Sent: Thursday, August 26, 2010 10:15 AM
To: Perkinson, H. (DCR); Pollock, Alan (DEQ)
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Subject: VA WIP - Issue with Post Processed Reduction Estimates

Hi Russ and Alan,

We noticed from the handouts provided at the August 24 VA SAG meeting that you are counting on post-processed reduction estimates for nursery BMP and CNT. We want to be clear that EPA is not allowing for post-processed reductions outside of the CB Watershed Model.

Regarding the nursery reuse BMP, we need you to provide supporting documentation to allow for us to determine how best to model it and decide on a placeholder interim efficiency.

Regarding CNT - because we already have acres reported under this practice with a CBP-approved efficiency, we need to continue to use that efficiency until it is updated in the near future through convening of technical panels as per the CBP-approved process. For that to happen, it is critical that VA (and we know PA is interested in this as well, and likely MD) make an official WQ Goal Implementation Team to get this on a fast track.

Please follow up with Mark Dubin and/or Chris Brosch if you have further questions.

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